

REMARKS

Claims 2 and 20 have been canceled; claim 1 has been amended. Therefore, claims 1 and 3-19 remain pending in the case. Further examination and reconsideration of the presently claimed application are respectfully requested.

Section 102 Rejection

Claims 1-19 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,730,634 to Seko (hereinafter “Seko”). The standard for “anticipation” is one of fairly strict identity. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. Of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); MPEP 2131. Seko does not teach or suggest all limitations of the currently pending claims, some distinctive limitations of which are set forth in more detail below.

Seko does not teach or suggest a probe needle adapted to contact a second one of the opposing ends. Amended claim 1 now contains the subject matter from previously examined claim 2, and claim 2 has been canceled. The combination of previously examined claims 1 and 2 make clear that a test fixture comprises both a probe pin and a probe needle. The probe pin is shown in Fig. 3A as item 670, and the probe needle is shown in Fig. 5 as item 890. The probe pin extends upward to contact one opposing end, and the probe needle extends downward to contact the other opposing end.

Seko makes no suggestion whatsoever of having both a probe needle and a probe pin contacting opposing terminal ends of a trace conductor -- in fact, Seko cannot have both a probe needle and a probe pin. Contrary to the characterizations made in the Office Action, contact point 25 in Seko is not a probe needle. Purposefully, the only contact made to the wafer in Seko is a single probe pin 22 that extends downward onto an upper surface of the wafer and, specifically, a gate conductor of the wafer. There is no suggestion in Seko that the gate conductor is one end of a trace conductor, where the other end extends to an opposing surface of the wafer. In fact, the opposing end of the gate conductor cannot extend to the opposing planar surface of the wafer since that surface is reserved for a gold plating (Seko -- col. 4, lines 53-55). Absent a probe needle separate and apart from a probe pin, where the probe needle contacts a second one of the opposing ends of a trace conductor, any suggestion that Seko anticipates present independent claim 1 must, therefore, be rejected.

Seko does not teach a pin retainer for retaining an upwardly extending pin (claim 5) or moving an upwardly extending pin along a y-axis and a z-axis (claim 13). Present independent claim 5 makes clear that the pin retainer retains the probe pin in an upwardly extending direction. Contrary to the present claimed configuration, the probe pin in Seko must extend downward since the lower surface of the wafer must be covered by a movable table 15. Seko could not be modified to accommodate an upwardly extending pin unless an opening were placed in the movable table of Seko, similar to that which is shown in present application Fig. 3A.

Not only does Seko fail to teach an upwardly extending probe pin, but Seko also fails to suggest that the probe pin can be moved in both a y-axis and a z-axis, as in present claim 13. Instead, the probe pin only moves along one axis (up/down). While table 15 in Seko can move in the x and y directions, probe pin 22 moves only in the z direction. Conversely, the present claim 13 makes clear that the table containing the substrate moves along an x-axis, but the probe pin moves both in the y-axis and z-axis directions. The probe pin in Seko simply does not have this capability.

Seko does not teach or suggest a probe pin that moves parallel to and perpendicular to a planar surface of the substrate on which a first one of the opposing ends are arranged (claim 4). Similar to claim 13, present claim 4 also makes clear that the present claimed probe pin moves in two directions, and certainly not in the singular direction to which Seko's probe pin is constrained.

Seko does not teach or suggest a pair of orthogonal walls and a slidable push plate (claim 9). Claim 9 indicates that a substrate 555 can be secured between a pair of orthogonal walls 530 and a push plate 560 (Specification -- Fig. 2). The push plate 560 is slidably attached to table 540 (Specification -- Fig. 2). Contrary to the characterizations made in the Office Action, Fig. 6A in Seko does not illustrate a pair of elongated walls and a push plate for several reasons. First, insulating support 51 is not used to support the substrate but, instead, supports probe pins (Seko -- Fig. 6A; col. 6, lines 25-30). Second, Seko makes no reference whatsoever to a movable push plate attached to a table for securing a wafer or substrate.

For at least the reasons set forth above, Seko does not teach, suggest, or provide motivation for all limitations of independent claims 1, 5, and 13. Therefore, claims 1, 5, and 13, as well as claims dependent therefrom, are patentably distinct over the cited art. Accordingly, Applicants respectfully request removal of the § 102(b) rejections of claims 1-19.

Section 103 Rejection

Claim 20 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Seko and U.S. Patent No. 5,534,784 to Lum et al. (hereinafter "Lum"). In response thereto, claim 20 has been canceled to render rejection thereto moot.

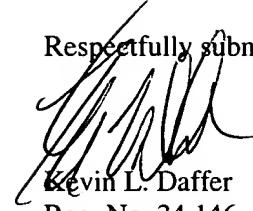
CONCLUSION

This response constitutes a complete response to all issues raised in the final Office Action mailed March 31, 2003. In view of the remarks traversing the rejections, Applicant asserts that pending claims 1 and 3-19 are in condition for allowance. If the Examiner has any questions, comments, or suggestions, the undersigned attorney earnestly requests a telephone conference.

If a Notice of Allowance is not issued, Applicant requests an Advisory Action from which a reasoned statement can be made to offer guidance for a subsequent appeal to be lodged by the Applicant. A reasoned statement should include some indication as to why Seko can suggest both a probe needle and a probe pin adapted to contact opposing ends of a trace conductor within a substrate. Currently, Seko only discloses a probe pin. Moreover, the statement should include a reason as to how Seko can be modified to form an upwardly extending probe pin, rather than a downwardly extending probe pin. The statement should also make some mention as to how Seko could be modified so that its probe pin can move along two axes, rather than one axis. Still further, the statement should mention how Seko can be modified so that it now has a pair of orthogonal walls and, more importantly, a slidable push plate for securing a substrate to a table between those orthogonal walls.

No fees are required for filing this amendment; however, the Commissioner is authorized to charge any additional fees, which may be required, or credit any overpayment, to LSI Logic Corporation, Deposit Account No. 12-2252/01-120.

Respectfully submitted,



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